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November 22, 2004, 16:46:52; Search time 144 Seconds (without alignments) 63.940 Million cell updates/sec
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                          1570615 seqs, 354127592 residues
                                                                                                                                                                                               US-10-783-095-10
131
1 GGGPGAGSLQPLALEGSLQKRGIVEQ 26
                                                                            OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                            Sequence:
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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Total number of hits satisfying chosen parameters:

Published Applications AA:*

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2: \cgn2_6/ptodata/1/pubpaa/PCT_NEW_DUB_pep:*

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16: \cgn2_6/ptodata/1/pubpaa/USIOA_PUBCOMB.pep:* /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB_pep://cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB_pep://cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB_PUB.pep://cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep://cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep: Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 4, Appli Sequence 2, Appli Sequence 2, Appli Sequence 4, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 4, Appli Sequence 5, Appli Sequence 13, Appl Sequence 13, Appl Sequence 1, Appli Description US-10-740-098-13 US-09-878-380-1 US-10-028-410-2 US-10-028-410-2 US-10-024-873-4 US-10-444-326-2 US-10-444-649-2 US-10-444-649-2 US-10-444-701-2 US-10-947-563-5 US-09-815-229-13 Query Match Length DB Score Result Š

100.0

Sequence 125, App		ď	e e	12	equence 1,	'n	'n	equence 2,	ď	44	Sequence 44, Appl	equence 4	44	equence 20	44	equence 44	equence 44	Sequence 44, Appl	Sequence 3, Appli	4	'n	'n	equence 33	'n	24	24	4,	e,	Ф 4	Sequence 9, Appli	Sequence 9, Appli
9 US-09-205-658-125	9 US-09-815-229-3	1	-969-74	6	US-10-038-68	.0-328-81	US-10-	-10-346-5	-321-	15 US-10-411-037-44	15 US-10-411-026-44	US-10-410-96	S-10-411-04	US-10	US-10	US-10-410-99	US-10-411	US	16 US-10-740-098-3	ΩS	5	9 US-09-280-030-62	US-10-425-115-	16 US-10-419-539-5	15 US-10-221-677-24	0-641-	9 US-09-815-229-4	.9 US-09-947-563-3	6 US-10-740-	09-815-229	16 US-10-740-098-9
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131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	128	125	125	107	107	107	107	100	100
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ALIGNMENTS

Sequence 13, Application US/09815229
| Sequence 13, Application US/09815229
| Sequence 13, Application US/09815229
| Patent No. US2002005861441
| GENERAL INFORMATION:
| APPLICANT: Filvaroff, Ellen H.
| TITLE OF INVENTION: USE OF INSULIN FOR THE TREATMENT OF CARTILAGENOUS DISORDERS
| FILE REFERENCE: P178671US
| CURRENT FILING DATE: 2001-03-22
| PRIOR FILING DATE: 2000-03-24
| NUMBER OF SEQ ID NOS: 17
| SEQ ID NO 13
| LENGTH: 54 ; OTHER INFORMATION: Portion of insulin variant from EP 171,147. US-09-815-229-13 TYPE: PRT ORGANISM: Artificial sequence

; Length 54; Indels Query Match
100.0%; Score 131; DB 9;
Best Local Similarity 100.0%; Pred. No. 1.9e-09;
Matches 26; Conservative 0; Mismatches 0; 1 GGGPGAGSLOPLALEGSLOKRGIVEQ 26 ò

0

Gaps

13 GGGPGAGSLOPLALEGSLOKRGIVEO 38 US-10-740-098-13
; Sequence 13. Application US/10740098
; Publication No. US20040138101A1
; GENERAL INFORMATION: RESULT 2 g

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US-09-858-935B-4
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US-10-054-873-4
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| APPLICANT: FUJirebio Inc. |
| APPLICANT: FUJirebio Inc. |
| APPLICANT: FUJirebio Inc. |
| APPLICANT: KITAJIMA, Sachiko |
| APPLICANT: KITAJIMA, Sachiko |
| APPLICANT: NAKATSUBO, Kaoru |
| APPLICANT: NISHIZONO, Isao |
| TITLE OF INVENTION: Immunoassay For Measuring Human C-Peptide and Kit Therefor |
| FILE REFERENCE: 0760-0221P |
| CURRENT APPLICATION NUMBER: US/09/878,380 |
| CURRENT FILING DATE: 2001-66-12 |
| PRIOR PELICATION NUMBER: JP 2000-174691 |
| PRIOR PELICATION NUMBER: JP 2000-174691 |
| PRIOR PELING DATE: 2000-06-12 |
| SOFTWARE: Patentin version 3.1 |
| SEQ ID NO 1 |
| LENGTH: 86 |
APPLICANT: Filvaroff, Ellen H.

APPLICANT: Okumu, Franklin W.

TILLE OF INVENTION: USE OF INSULIN FOR THE TREATMENT OF CARTILAGENOUS DISORDERS FILE OF INVENTION: USE OF INSULIN FOR THE TREATMENT OF CARTILAGENOUS DISORDERS FILE OF THE APPLICATION NUMBER: US,10/740,098

CURRENT APPLICATION NUMBER: US/09/815,229

PRIOR APPLICATION NUMBER: US/09/815,229

PRIOR APPLICATION NUMBER: US 60/192,103

PRIOR APPLICATION NUMBER: US 60/192,103

PRIOR FILING DATE: 2000-03-24

SEQ ID NOS: 17

LENGTH: 54
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US-09-858-935B-4

Sequence 4, Application US/09858935B

Publication No. US20030069177A1

SERBEAL INFORMATION:
APPLICANT: Dibaquie, Yves
APPLICANT: Lowanoff, Ellen
APPLICANT: Lowanoff, Ellen
APPLICANT: Lowano, Henry B.
TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
FILLE REBERENCE: P1794R1

CIRRENT APPLICATION NUMBER: US/09/858,935B

CURRENT PILING DATE: 2002-07-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
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                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26; Conservative
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US-09-878-380-1
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Best Local Similarity
Matches 26, Conserv
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Best Local Simi
Matches 26;
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ZIP: 9411-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FO Compartible
COMPUTER: TBM FO Compartible
OPERATING SYSTEM: FC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 22-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/10054873
Publication No. US20020164712A1
GENERAL INFORMATION:
APPLICANT: Gan, Zhong Ru
TITLE OF INVENTION: Chimeric Protein Containing an IITLE OF INVENTION: Chimeric Protein Chaperone-Like &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
TOWNSEND and TOWNSEND and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 131; DB 10; Best Local Similarity 100.0%; Pred. No. 3.1e-09; Matches 26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 131; DB 13; Best Local Similarity 100.0%; Pred. No. 3.1e-09; Matches 26; Conservative 0; Mismatches 0;
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Publication No. US20020160955A1
GENERAL INFORMATION:
APPLICANT: Dubaquie, Yves
APPLICANT: Lowman, Henry
TITLE OF INVENTION: PROTEIN VARIANTS
FILE REPREADED:
CURRENT APPLICATION NUMBER: US/10/028,410
CURRENT FILING DATE: 2001-12-19
PRIOR PILING DATE: 2001-12-19
PRIOR PILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SEQ ID NO 2
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PRIOR APPLICATION NUMBER: US 60/246,985
PRIOR FILING DATE: 2000-11-15
PRIOR APPLICATION NUMBER: US 60/204,490
PRIOR FILING DATE: 2000-05-16
NUMBER OF SEQ ID NOS: 153
LENGTH: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: San Francisco
STATE: California
                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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Description

Run on:

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15 US-10-383-285-1

10 US-08-807-742-16

10 US-09-807-742-16

11 US-10-609-019-21

11 US-10-346-163-1

12 US-10-346-163-1

13 US-09-280-030-49

9 US-09-280-030-49

9 US-09-280-030-49

10 US-09-969-748C-5

11 US-10-318-813-1

12 US-10-318-813-1

13 US-10-411-037-43

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10 US-10-46-149-47

10 US-10-419-33-11

10 US-10-419-33-11

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              Length
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10487
10487
10512
10512
10880
10895
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-DEPUDLished Applications NA -QFMT=fastap -SUFFIx=P2N.rnpb -MINMATCH=0.1
-DOPCL=0 -LOOPEXT=0 -UNITS=bits -GFRAT=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
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-NCPUG-6 -ICOPCA -DOMAP -DARGEQUERY -NGG GCRES=0 -MAIT -DSPBLOCK=100
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-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOF=6 -DELEXT=7
                                                                                                    November 22, 2004, 20:14:29; Search time 339 Seconds (without alignments) 414.437 Million cell updates/sec
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13: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USOD_PUBCOMB.seq:*
              GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                       nucleic search, using frame_plus_p2n model
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                                                                                                                                                                                                                                                                                                                        3627888 seqs, 2701811610 residues
                                                                                                                                                                                                   56
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1 GGGPGAGSLQPLALEGSLQKRGIVEQ
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Maximum Match 100%
Listing first 45 summaries
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Xgapop 10.0 , Xgapext (
Ygapop 10.0 , Ygapext Fgapop 6.0 , Fgapext Delop 6.0 , Delext
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Maximum DB seq length: 200000000
                                                                                                                                                                    US-10-783-095-10
                                                                                                                                                                    Title:
Perfect score:
Sequence:
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                                                                            OM protein
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Sequence 23, Appl Sequence 21, Appl Sequence 1, Appli Sequence 49, Appl Sequence 49, Appl Sequence 43, Appl Sequence 27, Appl Sequence 27, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 42, Appl Sequence 42, Appl Sequence 41, Appl Sequence 43, Appl Sequence 43, Appl

Sequence 15, Appl Sequence 11, Appl Sequence 13, Appl Sequence 3, Appli Sequence 4, Appli Sequence 26, Appli Sequence 26, Appli Sequence 346, Appli Sequence 14, Appli Sequence 939, Appli

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

ALIGNMENTS	KESULT 1. US-10-383-285-1	Sequence 1, Application US/10383285	Publication No. US20030200566Al	GENERAL INFORMATION: APPLICANT: STREATFIELD, STEPHEN	APPLICANT: HOWARD, JOHN	TITLE OF INVENTION: PRODUCTION OF INSULIN AND INSULIN-LIKE PROTEINS IN	TITLE OF INVENTION: PLANTS	FILE REFERENCE: 10040	CURRENT APPLICATION NUMBER: US/10/383,285	CURRENT FILING DATE: 2003-05-21	PRIOR APPLICATION NUMBER: 60/362,874	PRIOR FILING DATE: 2002-03-08	NUMBER OF SEQ ID NOS: 2	SOFTWARE: Patentin Ver. 2.1	SEQ ID NO 1	LENGTH: 258	TYPE: DNA	ORGANISM: Homo sapiens	US-10-383-285-1
	RESULT 1 US-10-383-28	; Sequence	, Publication	; GENERAL II ; APPLICAN	, APPLICAN	; TITLE OF	; TITLE OF	; FILE REF	; CURRENT	CURRENT	, PRIOR AP	; PRIOR FI	, NUMBER O	; SOFTWARE	SEQ ID NO	; LENGIH:	, TYPE: D	; ORGANIS	US-10-383-2

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Publication No. US20030204864A1;
GENERAL INFORMATION:
TITLE OF INVENTION: PLASTIDS;
CURRENT APPLICATION NUMBER: US/09/807,742;
CURRENT FILING DATE: 2001-04-18;
PRIOR APPLICATION NUMBER: PCT/US01/06288;
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 19
SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-09-807-742-17
Sequence 17, Application US/09807742
Sequence 17, Application US/09807742
Sequence 17, Application No. US20030204864A1
GENERAL INFORMATION:
APPLICANT: DAVIELL.
TITLE OF INVENTION: PRODUCTION OF PHARMACEUTICAL PROTEINS IN TRANSGENIC
TITLE OF INVENTION: PLASTIDS
FILE REPREARM APPLICATION NUMBER: US/09/807,742
CURRENT APPLICATION NUMBER: US/09/807,742
PRIOR APPLICATION NUMBER: PCT/US01/06288
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                133 GGCGGGGGCCCTGGTGCAGGCAGCCTGCAGCCCTTGGCCCTTGGAGGGGTCCCTGCAGAAG 192
                                                                                                                                                                    1 GlyGlyGlyProGlyAlaGlySerLeuGlnProLeuAlaLeuGluGlySerLeuGlnLys 20
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CRGANISM: Homo sapiens
US-09-807-742-16
                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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Best Local Similarity:
Query Match:
DB:
Alignment Scores:
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Pred. No.:
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US-09-807-742-16
                Pred. No.:
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RESULT 4

Sequence 23, Application US/10746149

Sequence 23, Application US/10746149

Fublication No. US20040172667A1

Sequence 23, Application US/10746149

Fublication No. US20040172667A1

APPLICANT: Foretti, William C.

APPLICANTON WIMBER: US 60/332,415

PRIOR APPLICANTON WIMBER: US 60/441,405

PRIOR PILING DATE: 2003-01-21

PRIOR APPLICANTON NUMBER: US 60/441,405

PRIOR APPLICANTON NUMBER: US 60/441,302

PRIOR APPLICANTON NUMBER: US 60/441,302

PRIOR APPLICANTON NUMBER: US 60/441,302

PRIOR APPLICANTON NUMBER: US 60/441,307

PRIOR PILING DATE: 2003-01-21

PRIOR APPLICANTON NUMBER: US 60/441,307

PRIOR PILING DATE: 2003-01-21

PRIOR PI
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                                                                                                                       FEATURE:
COTHER INFORMATION: Description of Artificial Sequence: Chloroplast
COTHER INFORMATION: modified proinsulin sequence
1. OTHER TROMMATION: modified proinsulin sequence
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                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
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Conservative:
Mismatches:
Indels:
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SEQ ID NO 17
LEWTH: 260
TYPE: DNA
ORGANISM: Artificial Sequence
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Pred. No.:
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Sequence 13, App]
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3: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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6: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-09-723-981-2
US-09-723-981-2
US-09-733-981-1
US-08-134-836-4
US-09-134-836-5
US-09-386-303A-4
US-09-386-303A-4
US-09-947-563-4
US-09-947-563-5
US-09-947-563-6
US-09-947-563-6
US-09-947-563-6
US-09-099-307-7
US-09-099-307-1
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Gapop 60.0 , Gapext 60.0
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Maximum DB seq length: 200000000
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Perfect score:
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28 26 29 30 26 31 32 26 33 32 26 33 34 35 26 34 35 26 34 36 26 40 36 40 26 40 26 40 20 40 40 40 40 40 40 40 40 40 40 40 40 40	ttch al Similarity 26; Conservation 16(GPGGGSL) 13 GGGCGGSL) 13 GGGCGGSL) 13 GGGCGGSL) 14 GGGCGGSL) 15 GGGCGGSL) 17 Conservation 18 Conservati	ID NOS
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APPLICANT: NAKATSUBO, Kaoru
APPLICANT: NAKATSUBO, Kaoru
APPLICANT: NISHIZONO, Isao
TILE OF INVENTION: Isao
FILE REFERENCE: 0760-0221P
CURRENT APPLICATION NUMBER: US/09/878,380
CURRENT APPLICATION NUMBER: US/09/879,380
FILOR APPLICATION NUMBER: 2000-06-12
PRIOR FILING DATE: 2000-06-12
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 86
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US-030-731A-43
; Sequence 43, Application US/08030731A
; Patent No. 5426036
; Patent No. 5426036
; GENERAL INFORMATION:
; APPLICANT: Koller, Klaus-Peter
APPLICANT: Uhlmann, Eugen
; APPLICANT: Uhlmann, Eugen
; APPLICANT: Wilmeder, Holger
; TITLE OF INVENTION: Processes for the Preparation of Foreign
; TITLE OF INVENTION: Processes for the Preparation of Foreign
; TITLE OF INVENTION: Processes for the Preparation of Foreign
; TITLE OF INVENTION: Processes
; CORRESPONDENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pinnegan, Henderson, Farabow, Garrett & ADDRESSEE: Dunner
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
100.0%; Score 26; DB 4; Length 86;
Best Local Similarity 100.0%; Pred. No. 5.7e-18;
Matches 26; Conservative 0; Mismatches 0; Indels
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COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/030,731A
FILING DATE: 10-AMX-1993
RIGHR APPLICATION DATA:
APPLICATION NUMBER: US 07/189,840
FILING DATE: 00-MAY-1988
FRILING DATE: 01-MOV-1989
PRICH APPLICATION DATA:
APPLICATION NUMBER: US 07/430,622
FILING DATE: 19-APR-1991
RIGHR APPLICATION DATA:
APPLICATION NUMBER: US 07/735,757
FILING DATE: 20-JUL-1991
PRICH APPLICATION DATE: 05-MAY-1987
FILING DATE: 05-MAY-1987
PRICH APPLICATION DATE: US-MAY-1987
FILING DATE: 05-MAY-1987
FILING DATE: 05-MAY-1987
FILING DATE: 05-MAY-1987
FILING DATE: 03-NOV-1988
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1300 I Street, N.W., Suite 700
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KURANO, Yoshihiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy o
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100.0%; Score 26; DB 4; Length 86;
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Matches 26; Conservative 0; Mismatches 0; Indels
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100.0%; Score 26; DB 4; Length 86;
Best Local Similarity 100.0%; Pred. No. 5.7e-18;
Matches 26; Conservative 0; Mismatches 0; Indels
                        Indels
Best Local Similarity 100.0%; Pred. No. 5.7e-18; Matches 26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                            Sequence 2, Application US/09723981

Batent No. 6506974

GENERAL INFORMATION:
APPLICANT: Dubaquie, Yves
APPLICANT: Lowman, Henry
TITLE OF INVENTION: PROTEIN VARIANTS
FILE REPERENCE: P1712R1
CURRENT APPLICATION NUMBER: US/09/723,981
CURRENT APPLICATION NUMBER: 09/477,923
PRIOR PLING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SEQ ID NO 2
LENGTH: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FACENTE NO. 8-5-5-94943.
GENERAL INFORMATION:
APPLICANT: Dubaquie, Yves
APPLICANT: Lowman, Henry
ILLE OF INVENTION: PROTEIN VARIANTS
FILE REFERENCE: P1712R1
CURRENT APPLICATION NUMBER: US/09/723,896
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US/09/477,923
PRIOR FILING DATE: 2000-01-05
SEQ ID NO 2
                                                                                                                    45 GGGPGAGSLQPLALEGSLQKRGIVEQ 70
                                                                            1 GGGPGAGSLOPLALEGSLOKRGIVEQ 26
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; Sequence 1, Application US/09878380
; Parent No. 6534281
; GENERAL INFORMATION:
APPLICANT: FULLISEDIO Inc.
;, APPLICANT: KITAJIMA, Sachiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 2, Application US/09723896
; Patent No. 6509443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , ORGANISM: Homo sapiens
US-09-723-896-2
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US-09-723-981-2
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US-09-723-981-2
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US-09-723-896-2
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Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 6, Appli
                                                                                                                                           November 22, 2004, 17:07:53 ; Search time 140 Seconds (without alignments) 65.767 Million cell updates/sec
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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6 US-10-740-098-13
US-09-838-935B-4
0 US-09-838-935B-4
3 US-10-054-873-4
4 US-10-054-873-4
4 US-10-444-359-4
5 US-10-444-649-2
5 US-10-444-649-2
5 US-10-444-649-2
6 US-10-444-649-2
7 US-09-947-563-4
US-09-947-563-5
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26
1 GGGPGAGSLQPLALEGSLQKRGIVEQ
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                                                                                                  - protein search, using sw model
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Gapop 60.0 , Gàpext 60.0
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Maximum DB seq length: 200000000
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14 26 100.0 110 9 US-09-205-658-125 Sequence 125, Appli 16 26 100.0 110 9 US-09-1615-229-3 Sequence 3, Appli 17 26 100.0 110 US-09-969-748C-6 Sequence 6, Appli 19 26 100.0 110 US-09-969-748C-6 Sequence 175, Appli 19 26 100.0 110 US-09-969-748C-6 Sequence 175, Appli 19 26 100.0 110 US-10-969-748C-6 Sequence 175, Appli 20 20 100.0 110 US-10-969-748C-2 Sequence 175, Appli 20 20 100.0 110 US-10-38-28E-2 Sequence 175, Appli 20 20 100.0 110 US-10-38-28E-2 Sequence 2, Appli 20 20 100.0 110 US-10-346-563-2 Sequence 2, Appli 20 20 100.0 110 US-10-346-563-2 Sequence 2, Appli 20 20 100.0 110 US-10-346-563-2 Sequence 2, Appli 20 20 100.0 110 US-10-340-410-026-44 Sequence 2, Appli 20 20 100.0 110 US-10-411-026-44 Sequence 2, Appli 20 20 100.0 110 US-10-411-026-44 Sequence 2, Appli 30 26 100.0 110 US-10-411-049-44 Sequence 44, Appli 30 26 100.0 110 US-10-411-049-44 Sequence 44, Appli 30 26 100.0 110 US-10-410-997-44 Sequence 44, Appli 30 26 100.0 110 US-10-410-997-44 Sequence 62, Appli 31 26 100.0 110 US-10-410-997-44 Sequence 62, Appli 32 26 100.0 110 US-10-425-115-337310 Sequence 62, Appli 40 20 US-10-425-115-337310 Sequence 62, Appli 41 21 80.8 33 17 US-10-425-115-337310 Sequence 7, Appli 41 21 80.8 33 17 US-10-425-115-337310 Sequence 1, Appli 41 21 80.8 35 10 US-0-269-43 Sequence 1, Appli 41 21 80.8 35 10 US-0-269-43 Sequence 1, Appli 41 21 80.8 35 10 US-0-269-43 Sequence 2, Appli 41 21 80.8 35 10 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 9 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 9 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 9 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 9 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 15 US-0-269-43 Sequence 2, Appli 42 19 73.1 31 15 US-0-269-43 Sequence 1, Appli 42 19 73.1 31 15 US-0-269-43 Sequence 2, Appli 44 19 73.1 31 15 US-0-269-43 Sequence 2, Appli 44 19 73.1 31 15 US-0-269-43 Sequence 2, Appli 44 19 73.1 31 15 US-0-269-43 S
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RESULT 1

US-09-015-29-13

Sequence 13, Application US/0981529

Factor to US202058614A1

GENERAL INFORMATION:

APPLICANT: Filvaroff, Ellen H.

APPLICANT: Filvaroff, Ellen H.

APPLICANT: Filvaroff, Ellen H.

APPLICANT: PARKIN WILL FEARKIIN W.

FILE REFERENCE: P1786R10S

CURRENT APLICATION NUMBER: US 60/192,103

FRIOR APPLICATION NUMBER: US 60/192,103

PRIOR FILING DATE: 2000-03-24

FRIOR APPLICATION NUMBER: US 60/192,103

PRIOR FILING DATE: 2000-03-24

FRIOR FILING DATE: 2000-03-24

FRIOR FILING DATE: 2000-03-24

FRIOR FILING DATE: 2000-03-24

FRIOR FILING DATE: 2000-03-24

FREIGH : 4

CORGANISM: Artificial sequence

FRATURE: APPLICATION Portion of insulin variant from EP 171,147.

GUETY MATCH

Best Local Similarity 100.0%; Pred. No. 2.9e-16;

Matches 26; Conservative 0; Mismarches 0; Indels 0; Gaps 0;

MATCHES 100-740-098-13

FRESULT 2

RESULT 2

RESULT 2

FRESULT 3

FRESULT 2

FRESULT 3

FRESULT 3
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1 GGGPGAGSLOPLALEGSLOKRGIVEQ 26
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PRIOR APPLICATION NUMBER: US 60/248,985
PRIOR FILING DATE: 2000-11-15
PRIOR APPLICATION NUMBER: US 60/204,490
PRIOR PILING DATE: 2000-05-16
NUMBER OF SEQ 1D NOS: 153
SEQ 1D NO 4
LENGTH: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/10028410 Publication No. US20020160955A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26; Conservative
                                                                                                                                                                                           , ORGANISM: Homo sapiens
US-09-858-935B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
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Best Local Similarity
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US-10-028-410-2
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| Sequence 1, Application US/09878380
| Patent No. US2002016043541
| GENERAL INFORMATION:
| APPLICANT: FUJirebio Inc.
| APPLICANT: MARATSUBO, Kaoru
| APPLICANT: MRINGSUBO, Kaoru
| APPLICANT: MRINGSUBO, Kaoru
| APPLICANT: MSTIZONO, Isao
| TITLE OF INVENTION: Immunoassay For Measuring Human C-Peptide and Kit Therefor
| FILE REPERENCE: 0760-0291P
| FILE REPERENCE: 0760-0291P
| CURRENT FILING DATE: 2001-06-12
| PRIOR APPLICATION NUMBER: UF 2000-174691
| PRIOR PILLING DATE: 2000-06-12
| NUMBER OF SEQ ID NOS: 2
| SOFTWARE: PatentIn version 3.1
     APPLICANT: Filvaroff, Ellen H.
APPLICANT: Okumu, Franklin W.
TITLE OF INVENTION: USS OF INSULIN FOR THE TREATMENT OF CARTILAGENOUS DISORDERS FILE REFERENCE: P1786R10S
CURRENT APPLICATION NUMBER: US/10/740,098
CURRENT FILING DATE: 2003-12-17
PRIOR APPLICATION NUMBER: US/09/815,229
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 17
SEQ ID NO 13
LENGTH: 54
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                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Portion of insulin variant from EP 171,147. US-10-740-098-13
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Publication No. US20030069177A1
GENERAL INFORMATION:
APPLICANT: Dubaquie, Yves
APPLICANT: Filvarcff, Bllen
APPLICANT: Lowman, Henry B.
TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
FILE REPERENCE: P1794R1
CURRENT APPLICATION NUMBER: US/09/858,935B
CURRENT FILING DATE: 2002-07-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 86;
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Best Local Similarity 100.0%; Pred. No. 2.9e-16;
Matches 26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

100.0%; Score 26; DB 9;
Best Local Similarity 100.0%; Pred. No. 4.3e-16,
Matches 26; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
US-09-878-380-1
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LENGTH: 86
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; Publication No. US20020164712A1
; Publication No. US20020164712A1
; GENERAL INFORMATION:
; APPLICANT: Gan, Zhong Ru
TITLE OF INVENTION: Chimeric Protein Containing an
IITLE OF INVENTION CONTAINING AN
IITLE OF INVEN
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APPLICATION NUMBER: US/10/054,873 FILING DATE: 22-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
SUPPRESSED: Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: Calfornia
COUNTRY: USA
Query Match
Best Local Similarity 100.0%; Pred. No. 4.3e-16;
Matches 26; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dubaquie, Yves
APPLICANT: Lowman, Henry
TITLE OF INVENTION: PROTEIN VARIANTS
FILE REFERENCE: P1712R1-1
CURRENT APPLICATION NUMBER: US/10/028,410
CURRENT FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: US/09/477,924
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 6
SEQ ID NO 2
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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November 22, 2004, 16:50:52 ; Search time 193 Seconds (without alignments) 77.512 Million cell updates/sec using sw model OM protein - protein search, Run on:

US-10-783-095-10 26 1 GGGPGAGSLQPLALEGSLQKRGIVEQ 26 Title: Perfect score: Sequence:

Scoring table:

OLIGO Gapop 60.0 , Gapext 60.0

1825181 segs, 575374646 residues Searched:

1825181 Total number of hits satisfying chosen parameters: 0 Word size :

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

UniProt_02:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

Descri	Q8hz80 pongo pygma	Q8hz81 gorilla go	P30407 cercopithec	P01308 homo sapien	macaca	P30410 pan troglod	buod	gorill	54 homo s	35 goril	151 homo	_	_	~		~	s ovis		LO.	•				9		^	Aaq00975 sus scro	2	Aaq00981 sus scro	0.098	
SUMMAKIES	O8HZ80	Q8HZ81	INS CERAE	INS HUMAN	INS MACFA	INS_PANTR	INS_PONPY	QEYK33	AAP35454	AAN06935	AAN39451	INS CANFA	INS RABIT	INS SPETR	QBWNW6	INS BOVIN	INS SHEEP	INS_PIG	35	AAQ00954	5	AAQ00960	AAQ00963	AAQ00966	AAQ00969	AAQ00972	AAQ00975	197	AAQ00981	6	AAC000985
DB	1	7	Н	Н	н	Н	Н	N	7	7	~	Н	Н	Н	N	Н	н	-	N	N	N	N	N	~	N	N	~	~	N	N	7
% Query Match Length	65	65	110	110	110	110	110	110	110	110	110	110	110	110	110	105	105	108	108	108	108	108	108	108	108	108	108	108	108	108	108
% Query Match	100.0		00	0	00	00	00	00	00	00	00	4.	4.	4.	4.	30.8	。	ö	30.8	ö	ö	ö	ö	。	٥.	。	。	°.	ö	30.8	0
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[1] SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
O'NUSSIN C., Tichy H., Klein J.;
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
-: SUBCELLULAR LOCATION: Secreted (By similarity).
-!- SIMILARITY: Belongs to the insulin family.
EMBL; AY092023; AAW76640.1;

Aaq00990 sus scrof	Q62587 psammomys o Q9sia8 arabidopsis O61060 mus musculu		Q829a9 streptomyce Q6di71 mus musculu	P54265 mus musculu Q6qhb8 homo sapien	Aas55053 homo sapi Q6xvi3 strix aluco	Q6xvj2 meleagris g
AAQ00987 AAQ00990	1 INS PSAOB 2 Q9SIA8 1 FXD3 MOUSE	FXD3 HUMAN Q8PNW5	Q829A9 Q6DI71	DMK MOUSE Q6QHB8	AAS55053 Q6XVI3	Q6XVJ2
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ALIGNMENTS

RESULT Q8HZ80	7LT 1 280			
A H	Q8HZ80 Q8HZ80;	PRELIMINARY;	PRT;	65 AA.
티	01-MAR-2003	(TrEMBLrel. 2	23, Created)	ed) semience undate)
i E	01-MAR-2004	rel.	Last	annotation update)
E C	Insulin (Fragment).	Insulin (Fragment).		
9 C	Eukarvota: Metazoa:	de (Orangacan). Prazoa: Chordata:	σ.	Cranjata: Vertebrata: Euteleostomi:
8	Mammalia, Eutheria;			
ŏ	NCBI TaxID=9600;			
RN	Ξ			
RР		FROM N.A.		
æ	O'hUigin C.,	C., Tichy H., Klein J.;	ein J.;	
R.	~	AR-2002) to t	he EMBL/Gen	Bank/DDBJ databases.
DR	EMBL; AY092024;		1;	
N.	GO; GO:0005576;		C:extracellular; IEA.	•
DR	GO; GO:0005179;			EA.
띪	GO; GO:00075	82; P:physiological	ogical process;	ess; IEA.
DR	InterPro; IP	825; Ins	IGF/relax.	
DR	Pfam; PF0004	PF00049; Insulin; 1.		•
FT	NON TER	1		
FT	NON TER			-
Š	SEQUENCE 6	65 AA; 6920 MW;		B772017FD8BCABEA CRC64;
QME	Query Match Best Local Simi Matches 26;	Similarity 100.0%; 6; Conservative	SC Pr	ore 26; DB 2; Length 65; ed. No. 4e-17; Mismatches 0; Indels 0; Gaps
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7				
QQ	39 99	GGGPGAGSLQPLALEGSLQKRGIVEQ		64
RESULT	JLT 2			
Q8HZ81	281			
Q I	Q8HZ81	PRELIMINARY;	PRT;	65 AA.
N V	Q8HZ81;			
E I	01-MAR-2003			
<u> </u>	01-MAK-2003	(Trembirel, 2	Last	sequence update;
3 1	SOUN-NOU-TO		ם מ	ammorarion mpdare/
DE DE	Insulin (Fragment).	gment).		
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3 6	Eukaryota; Metazoa; Memmelie: Fiitherie:			
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Gaps

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SEQUENCE FROM N.A.
MEDLINE=93364428; PubMed=8358440;
Lucassen A.M.; Bell J.I., Juliar C., Lathrop M.;
Lucassen A.M.; nisulin dependent diabetes mellitus maps to a 4.1
"Susceptibility to insulin dependent diabetes mellitus maps to a 4.1
Kb segment of DNA spanning the insulin gene and associated VNTR.";
Nat. Genet. 4:305-310(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE=80054779; PubMed=503234;
Bell G.I., Swain W.F., Pictet R.L., Cordell B., Goodman H.M.,
Rutter W.G., ""Inuleotide sequence of a cDNA clone encoding human preproinsulin.";
Nature 282:525-527(1979).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Pancreas;
MEDINEE-2238825; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=80147417; PubMed=6927840;
Sures I., Gredel D.V., Gray A., Ullrich A.;
"Nucleotide sequence of human preproinsulin complementary DNA.";
Science 208:57-59(1980).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=80120725; PubMed=6243748;
Bell G.I., Pictet R.L., Rutter W.J., Cordell B., Tischer E.,
Goodman H.M.;
"Sequence of the human insulin gene.";
Nature 284:26-32(1980).
                                                                                                                                                                                                                                                             100.0%; Score 26; DB 1; Length 110; 100.0%; Pred. No. 6.2e-17;
      PROSITE; PS00262; INSULIN; 1.
Direct protein sequencing; Glucose metabolism; Hormone;
Insulin family; Signal.
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12019 MW; 95A1F54BE7B247F9 CRC64;
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MEDLINE=80236113; PubMed=6248962;
Ullrich A., Dull T.J., Gray A., Brosius J., Sures I.;
"Genetic variation in the human insulin gene.";
Science 209:612-615(1980).
                                                                                                              C peptide.
Insulin A chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
                                                                                          Insulin B chain.
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                                                                                                                                                                                Interchain.
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95
110 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIINE-92219955; PubMed=1560757; Seino S., Bell G.I., Li W.; Sequences of primate insulin genes support the hypothesis of a slower rate of molecular evolution in humans and apes than in monkeys."; Mol. Biol. Evol. 9:193-203(1992).
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     procedure.";
J. Blol. Chem. 247:4866-4871(1972).
J. Blol. Chem. 247:4866-4871(1972).
J. FUNCTION: Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver.
J. SUBUNIT: Heterodimer of a B chain and an A chain linked by two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=72256016; PubMed=4626369; Deterron '0.D., Nehrlich S., Oyer P.E., Steiner D.F.; Peterron '0.D., Nehrlich S., Oyer P.E., Steiner D.F.; "Determination of the amino acid sequence of the monkey, sheep, and dog proinsulin C-peptides by a semi-micro Edman degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Cercopithecus.
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                                                                                                                                                                                                                                        100.0%; Score 26; DB 2; Length 65; 100.0%; Pred. No. 4e-17; tive 0; Mismatches 0; Indels
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65 65
65 AA; 6920 MW; B772017FD8BCABEA CRC64;
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005179; F:hormone activity; IEA.
GO; GO:0007582; P:physiological process; IEA.
InterPro; IPRO04825; Ins/IGF/relax.
Pfan; PF00049; Insulin; 1.
INSULIN family.
NON TER
65 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cercopithecus aethiops (Green monkey) (Grivet).
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-!- SIMILARITY: Belongs to the insulin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INS CERAE STANDARD; PRT; 110 AA. P30407; P01309; 01-APR-1993 (Rel. 25, Created) 05-APR-1993 (Rel. 25, Last sequence update) 05-UUL-2004 (Rel. 44, Last annotation update)
                                                                                                                                                                                                                                                                                                                                   1 GGGPGAGSLQPLALEGSLQKRGIVEQ 26
                                                                                                                                                                                                                                                                                                                                                                     39 GGGPGAGSLQPLALEGSLQKRGIVEQ 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HSSP, P01308, 1A10.
InterPro; IPR004825; Ins/IGF/relax.
Pfam; PF00049; Insulin; 1.
SPRINTS; PR0027; INSULINB.
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Best Local Similarity 100.
Matches 26; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Insulin precursor
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GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
               Copyright
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OM protein - protein search, using sw model

November 22, 2004, 16:58:57; Search time 38 Seconds (without alignments) 65.833 Million cell updates/sec Run on:

US-10-783-095-10 26 1 GGGPGAGSLQPLALEGSLQKRGIVEQ 26 Title: Perfect score: Sequence:

OLIGO Gapop 60.0 , Gapext 60.0 Scoring table:

283416 seqs, 96216763 residues 0 Word size : Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

SUMMAKIES	th DB ID Description	10 1 IPHU insecursor	2 B42179	2 JQ0178 insulin	2 A42179 insulin	1 INRB insulin	1 IPDG insulin	1 IPPG insulin	1 IPBO insulin	2 I78395 myotonic	2 I78393 myotonic	2 G84687 probable	2 I78396	2 I78394 · myotonic	0)	2 I51221	1 IPON insulin	1 IPXL1 insulin I	1 IPXL2 insulin II	1 IPCH insulin pr	1 IPCA insulin	1 IPRIDU insulin pr	1 INMS2 insulin	1 IPGP insulin pr	1 IPRT2 insulin	1 IPHF insulin pr	1 IPAF insulin precu	סמסמסניסני	יישכרווברזכמל זון
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2,6-dioxo-6-phenyl	2,6-dioxo-6-phenyl	hypothetical prote	biotin synthase (i	thyroid transcript	probable PPE prote	probable PPE prote	tyrosyl-tRNA synth	homoserine dehydro	hypothetical prote	glycine dehydrogen	glycine dehydrogen	T-cell surface gly	probable glycine d	probable glycine d	endoglucanase - Er
C35124	JN0816	T28709	B90044	146089	A70646	E70675	H81713	F84077	T40386	G84312	H70463	A26396	D75030	B71216	839962
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286	286	29	332	371	38(406	415	43]	456	47	48,	49	505	505	509
26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9
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30	31	32	33	34	32	36	3.7	38	9	40	41	4.2	43	44	45

ALIGNMENTS

	IPHU
	insulin precursor [validated] - human
	N; Alternate names: preproinsulin
	C;Species: Homo sapiens (man)
	C;Date: 23-Oct-1981 #sequence revision 23-Oct-1981 #text change 09-Jul-2004
	C; Accession: A93222; A94253; A94216; A94251; A93144; A92075; A91186; I58114; A015
	R; Bell, G.I.; Pictet, R.L.; Rutter, W.J.; Cordell, B.; Tischer, E.; Goodman, H.M.
_	Nature 284, 26-32, 1980
	A HALL COMMOND OF THE Briman Special of the Common Special of the

379; \$580

A; reflection of the human insulin gene.

A; residuate type: DNA

A; Residuate: 1-110 cent.

A; reflection of the human insulin gene.

A; reflection of the human insulin of the human preproinsulin.

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A;Accession: A93144
A;Accession: A93144
A;Accession: S23144
A;Accession: A93144
A;Accession: A55146
A;Color b.E.; Cho, S.; Peterson, J.D.; Steiner, D.F.
J. Biol. Chem. 246, 1375-1386, 1971
A;Title: Studies on human proinsulin. Isolation and amino acid sequence of the human panc A;Reference number: A92075; MUID:71116410; PMID:5101771
A;Accession: A92075
A;Molecule type: protein

Title: Amino acid sequence of the C-peptide of human proinsulin. Reference number: A91186; MUID:71257722; PMID:5560404

A; Accession: I58114

J.; Sundby, F.

R;Ko, A.; Smyth, D.G.; Markussen, Eur. J. Biochem. 20, 190-199, 1971

A; Residues: 57-87 < OYE>

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C;Species: Pan troglodytes (chimpanzee)
C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: A42179; S20588
R;Selino, S.; Bell, G.I.; Li, W.H.
Mol. Biol. Evol. 9, 193-203, 1992
A;Fitle: Sequences of primate insulin genes support the hypothesis of a slower rate of mc A;Reference number: A42179; WuID:92219953; PMID:1560757
A.Cross-references: UNIPROT: P30407; EMBL: X61092; NID: 922808; PIDN: CAA43405.1; PID: 922809
A; Cross-references: UNIPROT: P30407; EMBL: X61092; NID: 922809; PIDN: CAA43405.1; PID: 922809
A; Note: sequence extracted from NCBI backbone (NCBIN: 95185, NCBIP: 95194)
B; Peterson, J.D.; Nehrlich, S.; Oyer, P.B.; Steiner, D.F.
J. Biol. Chem. 247, 486-4871, 1972
A;Title: Determination of the amino acid sequence of the monkey, sheep, and dog proinsul)
A;Reference number: A92111; MUID: 72258016; PMID: 4626369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Wetekam, W.; Groneberg, J.; Leineweber, M.; Wengenmayer, F.; Winnacker, E.L.
Gene 19, 179-183, 1982
A;Title: The nucleotide sequence of cDNA coding for preproinsulin from the primate Macace
A;Reference number: JQ0178; MUID:83080474; PMID:6184262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              insulin precursor - crab-eating macaque
C;Species: Macaca fascicularis (crab-eating macaque)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         y match 100.0%; Score 26; DB 2; Length 110; Local Similarity 100.0%; Pred. No. 4.4e-18; Pred. S. 26; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 110;
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                                                                                                                                                                                                                                                                                                                                                                                                  C)Superfamily: insulin
C(Keywords: hormone; pancreas
F)1-24/Domain: signal sequence #status predicted <SIG>
F)25-54/Domain: insulin chain B #status predicted <BCH>
F)25-54/Domain: connecting peptide #status spredicted <MAT>
F)57-97/Domain: connecting peptide #status experimental <F)90-110/Domain: connecting peptide #status predicted <ACH>
F)91-96/43-109/95-100/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 26; DB 2; I 100.0%; Pred. No. 4.4e-18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGGPGAGSLOPLALEGSLOKRGIVEQ 26
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                                                                                                                                                                                                                                                                A,Molecule type: protein A,Residues: 57-87 <PET> C,Genetics:
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                                                                                                                                                                                                                               A; Accession: A05232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Accession: JQ0178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A, Accession: JQ0178
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A/Status: preliminary; translated from GB/EMBL/DDBJ
A/Status: 1-59.63-110 «RES»
A/Residues: 1-59.63-110 «RES»
A/Cross-references: GB:LI5440; NID:g307071; PIDN:AAA59179.1; PID:g307072
R/Siber; P.; Kamber, B.; Hartmann, A.; Joehl, A.; Riniker, B.; Rittel, W.
Helv. Chim. Acta 57, 2617-2621, 1974
A/Title: Totalsynthese von Humaninsulin unter gezielter Bildung der Disulfidbindungen.
A/Reference number: A91636; MUID:75077277; PMID:4443293
A/Contents: annotation; synthesis
A/Note: alsulfide-bonded human insulin was synthesized; the synthetic hormone was identify a Noither article in German with English abstract
R/Naithani, V.K.
                                                                                                                          A;Accession: A91186
A;Molecule type: protein
A;Residues: 57-87 < KOA-
R;Lucassen, A.M.; Julier, C.; Beressi, J.P.; Boitard, C.; Froguel, P.; Lathrop, M.; Bell
Nature Genet. 4, 305-310, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hoppe-Seyler's Z. Physiol. Chem. 354, 659-672, 1973
A;Title: The synthesis of C-peptide of human proinsulin.
A;Reference number: A91658; MID:75040007; PMID:4803504
A;Contents: annotation; synthesis of residues 57-87
B;Getger, R.; Jaeger, G.; Koenig, W.
Chem. Ber. 106, 2347-2352, 1973
A;Title: Synthesis of the complete sequence of human proinsulin C-peptide and its [Glu-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A90914
A; Reference number: A90914
R; Contents: annotation; synthesis of residues 57-87
R; Kaufmann, U.E.; Irminger, U.C.; Halban, P.A.
Biochem. U. 310, 869-874, 1995
A; Title: Sequence requirements for profinsulin processing at the B-chain/C-peptide juncti
A; Reference number: S5861; MUID:96013185; MID:7575420
A; Reference number: S5861; Aire-directed mutagenesis study of proteolytic processing
                                                                                                                                                                                                                                                                                      A.Title: Susceptibility to insulin dependent diabetes mellitus maps to a 4.1 kb segment A;Reference number: IS8114; MUID:93364428; PMID:8358440
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C;Species: Cercopithecus aethiops (green monkey, grivet)
C;Abecies: Cercopithecus aethiops (green monkey, grivet)
C;Accession: B42179; A05232; Si4994; S22056
R;Seino, S.; Bell, G.I.; Li, W.H.
Mol. Biol. Evol. 9, 1993. 1992
A,Title. Sequences of primate insulin genes support the hypothesis of a slower rate A,A;Reference number: A42179; MuID:92219953; PMID:1560757
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Length 110; Indels

100.0%; Score 26; DB 1; L llarity 100.0%; Pred. No. 4.4e-18; Conservative 0; Mismatches 0;

Local Similarity les 26; Conser

Query Match Best Loca Matches

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C; Superfamily: insulin C; Keywords: hormone; pancreas F;1-24/Domain: signal sequence #status predicted <SIG> F;2-5-54/Domain: insulin chain B #status experimental <BCH> F;25-54/Domain: insulin #status experimental <AMT> F;5-5-7/Domain: connecting C peptide #status experimental <CPE>> F;91-010/Domain: insulin Chain A #status experimental <ACH> F;91-10/Domain: insulin chain A #status experimental <ACH> F;31-96,43-109,95-100/Disulfide bonds: #status experimental

A;Cross-references: GDB:119349; OMIM:176730 A;Map position: 11p15.5-11p15.5 A;Introns: 63/1

A; Gene: GDB: INS

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protein

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Run on:

Sequence:

Word size:

Searched:

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Homo sapiens (human)
Homo sapiens
Homo sapiens
Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bamania; Eutheria; Primates; Catarrhini; Hominidae; Homo.

En (bases 1 to 166)
Melton,D., Brown,J., Kenty,G., Permutt,A., Lee,C., Kaestner,K.,
Lemishka,I., Scearce,M., Brestelli,J., Gradwohl,G., Clifton,S.,
Hillier,L., Marra,M., Pape,D., Wyle,T., Martin,J., Blistain,A.,
Schmitt,A., Theising,B., Ritter,E., Ronko,I., Bennett,J., Gibbons,M., McCann,R., Cole,R., Tsagareishvili,R.,
Williams,T., Jackson,Y. and Bowers,Y.
Endocrine Pancreas Consortium
AL Unpublished (2000)
Other ESTS: id94h08.y1
Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi Inoue
Endocrine Pancreas Consortium
Harvard University, Howard Hughes Medical Institute
Dept of Molecular and Cellular Biology, 7 Divinity Ave, Cambridge,
MA 02138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BI711381 166 bp mRNA linear EST 11-MAR-200
id94h08.x1 Human insulinoma Homo sapiens cDNA clone IMAGE:5023718
3' similar to SW:INS_HUMAN P01308 INSULIN PRECURSOR. [1] ;, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fax: 617-495-8557
Emall: dmelfon@blohp.harvard.edu
Library was constructed by Dr. J. Ferrer In vivo mass-excised
pBluescript SK- by Dr. H. Inoue DNA sequencing by: Washington
                                                                         BU784792
CA948576
BQ271297
                                                                                                          BQ632376
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BQ272471
BU787442
                                                                                                                                                      BU949768
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AUT798626
BU5798621
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BO128108
BO2721179
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BMB57652
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BI711381.1 GI:15687076
  rel: 617-495-1812
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  oldsymbol{\omega}
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BI711381/c
LOCUS
DEFINITION
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AUTHORS
  -MODEL=frame+_princed=1 - DEV=x1h
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BQ548672 ik92b08.x
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BM857672 ij69f01.x
BM857847 ij69f01.x
BM87847 ij69f01.x
BM787847 id9f01.x
                                                                                       (without alignments)
463.519 Million cell updates/sec
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                                                                          November 22, 2004, 21:32:18 ; Search time 2044 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
          GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                      frame_plus_p2n model
                                                                                                                                                                                                                                    32822875 segs, 18219865908 residues
                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                             26
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                                                                                                                                             GGGPGAGSLQPLALEGSLQKRGIVEQ
                                                                                                                                                                             Xgapext 60.0
Ygapext 60.0
Fgapext 7.0
Delext 7.0
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BM511718
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BQ548672
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BQ267409
BM857847
BU787471
BQ270646
                                                     nucleic search, using
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Maximum DB seq length: 2000000000
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Xgapop 60.0 , Xg
Ygapop 60.0 , Yc
Fgapop 6.0 , F
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Database :

Result

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ik04e07.x ij90d09.x ig43e09.x ij69c04.x iq43e09.y

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Best Local Similarity:
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AUTHORS
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Endocrine Pancreas Consortium
Harvard University, Howard Hughes Medical Institute
Dept of Molecular and Cellular Biology, 7 Divinity Ave, Cambridge,
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 168)
University Genome Sequencing Center For information on obtaining clone please contact: Dr. Hiroshi Inoue (hinoue@im.wustl.edu) Seq primer: -40UP from Gibco.
Location/Qualifiers
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Endocrine Pancreas Consortium
Unpublished (2000)
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Tel: 617-495-1812
Fax: 617-495-8557
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COMMENT
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                                                                                                             FEATURES
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Score:

δ Db

Db 8

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Lauraryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

El (Dases I to 174)

El (Dases I to 174)

Melton, D., Brown, J., Kenty, G., Permutt, A., Lee, C., Kaestner, K., Lemishka, I., Scearce, M., Brestelli, J., Gradwohl, G., Clifton, S., Hiller, L., Marra, M., Pape, D., Wylie, T., Martin, J., Blistain, A., Schmitt, A., Thaising, B., Ritter, E., Ronko, I., Bennett, J., Cardenas, M., Gibbons, M., McCann, R., Cole, R., Tsagareishvili, R., Williams, T., Jackson, Y. and Bowers, Y.

Endocrine Pancreas Consortium

Unpublished (2000)

Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi Inoue Endocrine Pancreas Consortium

Harvard University, Howard Hughes Medical Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              University protocol

(http://genome.wustl.edu/est/lambda_protocol.shtml).

Please contact Hiroshi Inoue, MD/PhD for further information on this library (Metabolism Division, Permutt information on this library (Metabolism Division, Permutt information on this Library (Metabolism Division, Permutt information on this library, Mashington University Rohool of Medicine, Box 8127, 660 S Euclid Ave. St. Louis, MO 63110). Note: this is a Washington University Pancreas EST project library. "
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Library was constructed by Dr. J. Ferrer In vivo mass-excised to pBluescript SK- by Dr. H. Inoue DNA sequencing by: Washington Naiverselty Genome Sequencing Center For information on obtaining a clone please contact: Dr. Hiroshi Inoue (hinoue@im.wustl.edu)
Trace considered overall poor quality
Seq primer: -400P from Gibco
High quality sequence stop: 1.

Location/Qualifiers
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Indels:
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/organism="Homo sapiens"
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Perfect score:

Title:

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Sequence:

Scoring table:

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Sequence 23, Appl
Sequence 21, Appl
Sequence 1, Appli
Sequence 49, Appl
Sequence 40, Appl
Sequence 5, Appl
Sequence 7, Appl
Sequence 43, Appl
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32, Appl
31, Appl
47, Appl
41, Appl
41, Appl
42, Appl
43, Appl
152647,
25, Appl
163, Appl
162647,
26, Appl
164, Appl
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publication No. US200302005661

genuence 1, Application US/10383285

publication No. US200302005661

genuence 1, Application No. US200302005661

APPLICANT: STEATFIELD.

TITLE OF INVENTION: PRODUCTION OF INSULIN AND INSULIN-LIKE PROTEINS IN

TITLE OF INVENTION: PLANTS

TITLE OF INVENTION: PLANTS

TITLE OF INVENTION: PLANTS

CURRENT APPLICATION NUMBER: US/10/383,285

CURRENT PLING DATE: 2003-05-21

PRIOR PILING DATE: 2002-03-08

NUMBER OF SEQ ID NOS: 2

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 1

LENGTH: 258
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Sequence 48, Ap
Sequence 10, Ap
Sequence 5, Ap
Sequence 1, Ap
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                                                                          Sequence 1,
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Sequence 3
Sequence 4
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Sequence 1
Sequence 2
                        Description
                                                            15 US-10-383-285-1
10 US-09-807-742-16
11 US-09-807-742-16
11 US-10-807-742-16
12 US-10-807-742-16
13 US-10-746-199-23
14 US-10-746-199-23
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17 US-10-411-037-43
17 US-10-411-037-43
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18 US-10-609-019-27
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19 US-10-609-019-32
19 US-10-609-019-43
10 US-10-419-43-43
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CORGANISM: Homo sapiens
US-10-383-285-1
Query
Match 1
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1. /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2. /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3. /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
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22. /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
                           GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                  OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3627888 seqs, 2701811610 residues
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Database :

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RESULT 2
US-09-807-742-16
Sequence 16, Application US/09807742
Sequence 16, Application US/09807742
Sequence 16, Application No. US2030204864A1
GENERAL INFORMATION:
APPLICANT: DANIELL, HENRY
TITLE OF INVENTION: PRODUCTION OF PHARMACEUTICAL PROTEINS IN TRANSGENIC
TITLE OF INVENTION: PLASTIDS
FILE REPREMENCE: 1465-PCT-US-00
CURRENT APPLICATION NUMBER: US/09/807,742
CURRENT FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 16
LENGTH: 260
TYPE: DAM
CREANISM: Homo sapiens
US-09-807-742-16
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Sequence 17, Application US/09807742

Fublication No. US20030204864A1

GENERAL INPORMATION:

APPLICANT: DANIELL, HENRY

TITLE OF INVENTION: PLASTIDS

FILE REFRENCE: 1465-PCT-US-00

CURRENT APPLICATION NUMBER: US/09/807,742

CURRENT FILING DATE: 2001-04-18

PRIOR FILING DATE: 2001-02-28

NUMBER OF SEQ ID NOS: 19

SOFTWARE: Patentin Ver. 2.1
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                                                                                                                               US-10-783-095-10 (1-26) x US-10-383-285-1 (1-258)
                                                                                               Gaps:
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Alignment Scores:
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US-10-746-149-23.

US-10-746-149-23.

US-10-746-149-23.

Publication No. US20040172667A1

GENERAL INFORMATION:

APPLICANT: Cooper, Fichard K.

APPLICANT: Cooper, William C.

APPLICANT: Cooper, William C.

APPLICANT: Cooper, William C.

APPLICANT: Cooper, William C.

APPLICANT: Gary G.

TILE REFERENCE: 51687-0280 (51687-294923)

CURRANY PAPLICATION NUMBER: US/10/746,149

PRIOR PILING DATE: 2003-12-2

PRIOR APPLICATION NUMBER: US 60/441,381

PRIOR FILING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21

PRIOR PRIOR PLING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21

PRIOR PRIOR PLING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21

PRIOR PLING DATE: 2003-01-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GlyGlyGlyProGlyAlaGlySerLeuGlnProLeuAlaLeuGluGlySerLeuGlnLys
                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence: Chloroplast OTHER INFORMATION: modified proinsulin sequence
                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 ArgGlyIleValGluGln 26
SEQ ID NO 17
LENGTH: 260
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 52
SOFTWARE: Patentin version 3.2
SEQ ID NO 23
LENGTH: 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
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COTHER INFORMATION: Synthetic
US-10-746-149-23
                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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Best Local Similarity:
Query Match:
DB:
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Pred. No.:
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                                                                                                        FEATURE:
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Sequence 13, Appl
Patent No. 5514646
Sequence 9, Appli
Patent No. 5514646
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Sequence 1
Sequence 3
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Sequence 17, Application US/08600783

Patent No. 5962267

GENERAL INFORMATION:

APPLICANT: SHIN, Hang Cheol
APPLICANT: KIM, Dae Young
APPLICANT: KIM, Chong Suhl
TITLE OF INVENTION: Proinsulin Derivative and Process
TITLE OF INVENTION: Proinsulin Derivative and Process
TITLE OF INVENTION: For Producing Human Insulin
WUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSE: SHIN, Hang Cheol
STREET: Seangma-Hanshin Apt. 102-1206,
STREET: #245 Cholsan-dong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: KIM, Dae Young
STREET: Sosa Jukong Apt. 108-202, Sosa Bon-dong,
STREET: Sosa-ku
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Kwangmyung-shi
STATE: Kyungki-do
COUNIRY: Republic of Korea
ZIP: 423-03
ADRESSEE: CHANG, Seung Gu
STREET: Hyundai Apt. 71-203, Apkujong-dong,
STREET: Kangnam-ku
                                                   US-09-280 030-49
US-09-280 030-49
US-09-280 030-48
US-09-280 030-48
US-09-280 030-48
US-09-280 030-48
US-09-38-31-38-1
US-09-38-31-38-1
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US-09-15-38-1
US-09-16-38-1
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US-09-16-38-1
US-09-16-38-1
US-09-537-696-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: KIM, Chong Suhl
STREET: Garden Heights Apt. 202-801, #100,
                                                                                                                                                                                                                                                                                                                                                                    US-09-485-286-9
                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
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135-110
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Republic of Korea
CITY: Bucheon-shi
Seoul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Seoul
STATE: Seoul
COUNTRY: Rep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422-23
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US-08-600-783-17
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-MODBL=frame+ p2n.model.-DEV=Xlh
-MODBL=frame+ p2n.model.-DEV=Xlh
-Q=/Cgn2_1/USPTO_spool/US10783095/runat_22112004_143632_25659/app_query.fasta_1.199
-Q=/Cgn2_1/USPTO_spool/US10783095/runat_22112004_143632_25659/app_query.fasta_1.199
-Q=/Cgn2_1/USPTO_spool/US10783095/runat_22112004_143632_25659/app_query.fasta_1.199
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=011go
-TRANS=bumand+0.cdi -LIST=45 -DOOALIGN=200 -TRR SCORE-guality -THR_MIN=1
-ALIGN=15 -MODB=LCGL -OUTPWT=pto -NORM=ext -HRAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US10783095 @CGN 1 1 69 @runat_22112004 143632_25659
-NGTU-6 -LTCUPU3 -NO MAAP -LARGEQUERY -NG $$CORES=0 -WAIT -DSDBLCCK=100
-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THRADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELGN=7
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Sequence 10, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 14, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
                                                                              November 22, 2004, 21:33:28; Search time 69 Seconds (without alignments) 267.833 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued_Patents_NA:*
1: /cgn2_6/ptodate1/lina/5A_COMB.seq:*
    /cgn2_6/ptodate1/lina/5B_COMB.seq:*
3: /cgn2_6/ptodate1/lina/6A_COMB.seq:*
4: /cgn2_6/ptodate1/lina/6B_COMB.seq:*
5: /cgn2_6/ptodate1/lina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodate1/lina/PCTUS_COMB.seq:*
           GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                          protein - nucleic search, using frame_plus_p2n model
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US-08-673-312-10
US-07-918-953-12
US-07-918-953-14
US-08-081-661-12
US-07-918-953-16
US-07-918-953-16
US-07-918-953-16
US-07-764-655D-13
US-07-764-655D-13
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US-08-030-731A-41
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                                                                                                                                                                                                                                                    824507 segs, 355394441 residues
                                                                                                                                                      GGGPGAGSLQPLALEGSLQKRGIVEQ 26
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                                                                                                                                                                                        Xgapext 60.0
Ygapext 60.0
Fgapext 7.0
Delext 7.0
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Maximum DB seq length: 200000000
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Xgapop 60.0 ,
Ygapop 60.0 ,
Fgapop 6.0 ,
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10, Appli 1, Appli 3, Appli 2, Appli 18, Appli 14, Appl

Appli Appli

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Alignment Scores:
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CITY: PA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10, Application US/08673312;
Patent No. 5891699;
GENERAL INFORMATION:
APPLICANT: BOULAIN, JEAN-CLAUDE
APPLICANT: CATTOLICO, LAURENCE
APPLICANT: MENEZ, ANDRE
TITLE OF INVENTION: MODIFIED BACTERIAL ALKALINE PHOSPHATASES
TITLE OF INVENTION: AND THEIR APPLICATION
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
STREET: 1754 C. INPERPORMENTIAL AND MAIL AND MAIER & NEUSTADT,
                                                  COUNTY: Regulation of Korea ZIP: 706-040
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk, 3.5 inch, 1.44MB storage COMPUTER: IBM PC/AT
OPERATING SYSTEM: MS-DOS
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
FILING DATE:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400 CITY: ARLINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
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Hwangkeum-dong, Soosung-ku
                                                                                                                                                                                                                                                                  CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: KR 95-2751
FILING DATE: 15-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: Shahan Islam
                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER:
TELECHMUNICATION INFORMATION:
TELEPHONE: (212) 278-1000
TELETAX: (212) 953-7249
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
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26.00
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STRANDEDNESS: sing
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Best Local Similarity:
Query Match:
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                                          Taegu
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                 Taegu
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US-07-918-953-12
Sequence 12, Application US/07918953
Sequence 12, Application US/07918953
Sequence 12, Application US/07918953
Settle 12, Management 12, Management 12, Mapplicant Larson, ERIC R.
TITLE OF INVENTION: TISSUE-SELECTIVE INSULIN ANALOGS
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS: HORRISON & FORESTER
STREET: 755 PAGE MILL ROAD
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative:
Mismatches:
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REFERENCE/DOCKET NUMBER: 21900-2027420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                             SOTTWARE: Patentin Release #1.0, Ver CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/673,312 FILING DATE: 28-UNN-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 95-07833
FILING DATE: 29-UNN-1995
ATTORNEY/AGENT INFORMATION:
NAME: OBLON, NORMAN F.
REFERENCE/DOCKET NUMBER: 24,618
TELEPHONE: 703-413-3000
TELEPHONE: 703-413-3000
INFORMATION FOR SEQ ID NO: 10: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                     846-380-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURENT APPLICATION DATA:
PLING DATE: 19920730
FLILING DATE: 19920730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: other nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: 1BM PC compatible
COMPUTER: 1BM PC compatible
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NAME: BOZICEVIC, KARL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.97e-17
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100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 269 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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Best Local Similarity:
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Title: Perfect score: Sequence:

protein

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Scoring table:

Word size: Searched:

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Aact 3935 Metryr hu Aact 80401 Proinsuli Aact 80401 Proinsuli Aact 80402 Proinsuli Aact 80402 Proinsuli Aact 80403 Chelating Aact 80403 Noch-Sall Abres 8040407 Human Dre Aact 8040 Proinsuli Proinsuli Aact 8040 Proinsuli 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proinsulin, human, beta-turn peptide, insulin, A chain; protein folding; enzymatic cleavage, B chain; miniproinsulin; enzymatic hydrolysis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADL24432
ADN49715
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AAA95514
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AAN'S 0082
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AAT 7552
AAT 7552
AAT 75520
AAX 5920
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AAX 29531
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AAX 29531
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AAQ99025
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proinsulin coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-APR-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chang S, Kim D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-373460/38.
14-FEB-1996;
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 AAT37134;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
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  Command line parameters:
-MODEL=frame+ p2n.mcdel -DEV=xlh
-Q=/Cgn2_1/USPTO_spool/US10783095/runat_22112004_143630_25620/app_query.fasta_1.199
-Q=/Cgn2_1/USPTO_spool/US10783095/runat_22112004_143630_25620/app_query.fasta_1.199
-DB=N Geneseq_235ep04 -QFWT=fastap -SUFFIX=P2NO11go.rng -MINMATCH=0.1
-LOOPGL=0 -LOOPEXT=0 -UNITS=bits -STRAT=1 -ENN=-1 -MATRIX=0.190
-TRAMS=bumand10.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=quality -THR_MN=1
-ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HF3PSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US10783095_@CGN 1 1 470 @runat_22112004 143630_25620
-NGPU=6 -LOOP MAAP -MARGAUGHEY -NGS_GCRS=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELDEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Adc3134 Proinsuli
Adc51568 Human pro
Adf16306 Human alb
Adh21708 Human lon
Adi04119 Proinsuli
Aat17831 Optimised
                                                                                          November 22, 2004, 20:48:38; Search time 327 Seconds (without alignments) 417.385 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
               GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                   using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                       4134886 seqs, 2624710521 residues
                                                                                                                                                                            GGGPGAGSLQPLALEGSLQKRGIVEQ 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                  5 60.0 , Xgapext 60.0
5 60.0 , Ygapext 60.0
6 6.0 , Fgapext 7.0
6.0 , Delext 7.0
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ADC51568
ADF16306
ADH21708
ADI04119
AAT17831
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1. geneseqn1980s:*
2. geneseqn1990s:*
3. geneseqn2000s:*
4. geneseqn2001as:*
5. geneseqn201as:*
6. geneseqn201as:*
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geneseqn2003ds:*
geneseqn2004s:*
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geneseqn2003bs:*
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Maximum DB seq length: 200000000
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26
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Database :

Result

chains linked by small

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New human pro-insulin derivs. - comprising A and

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Antidiabetic; insulin; diabetes; genetic engineering; plant tissue; ds;
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yields than with current techniques
                                                                                                                             Example 4; Page 18; 52pp; English
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This sequence represents a synthetic human proinsulin coding sequence.

The codon preference of this sequence has been altered to favour the preferred codons in E. coll: This sequence can be used in the human proinsulin derivatives of the invention. In the derivatives of the invention, a beta-turn peptide (see AAW0395-W03938) is used to join the human insulin A and B chains. Beta-turn peptides are thought to be sites that they are determined by short-range interactions, and therefore limit the they are determined by short-range interactions, and therefore limit the conformational space available to the polypeptide chain. Beta-turns also play a valuable role in relation to enzymatic cleavage. By using the insulin derivatives (also referred to as miniproinsulin), refolding and proinsulin (which contains a bulky C-peptide). The derivatives can be recovered from transformed host cells in higher refolding yields than with proinsulin (which contains a bulky C-peptide). The derivatives can be recovered from transformed host cells in higher refolding yields than by enzymatic hydrolysis, such as with trypsin and carboxypeptidase B. The insulin derivatives are easier to produce than current derivatives. By using the derivatives of the invention, insulin can be produced at higher colls.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50 A; 67 C; 75 G; 66 T; 0 U; 0 Other;
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GlyGlyProGlyAlaGlySerLeuGlnProLeuAlaLeuGluGlySerLeuGlnLys

Human proinsulin-encoding nucleotide sequence #SEQ ID 1.

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The invention relates to a plant, which expresses an insulin or an insulin-like protein. The plant or plant cells are useful as sources of (pro)insulin for a variety of purposes, particularly for producing (pro)insulin proteins in commercial quantities. Plant tissue can be orally administered to diabetic animals as an alternative to insulin injections. The plant-produced proteins are also useful for providing less expensive and more readily available source of the protein as reagents, or in other experimentation involving insulin proteins are current sequence represents the human proinsulin-encoding nucleotide sequence used in an example from the invention for introduction into
New plant or plant cells expressing an insulin or an insulin-like protein, useful as sources of (pro)insulin, particularly for producing (pro)insulin proteins in commercial quantities, or as oral replacement for insulin injections.
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 258 BP; 38 A; 98 C; 78 G; 44 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
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1 GlyGlyGlyProGlyAlaGlySerLeuGlnProLeuAlaLeuGluGlySerLeuGlnLys 셤 ò

Gaps:

US-10-783-095-10 (1-26) x ADC51568 (1-258)

21 ArgGlyIleValGluGln 26 193 CGCGGTATCGTGGAGCAG

ò 셤

ВР ADF16306 standard; DNA; 258 ADF16306;

(first entry) 12-FEB-2004 Human albumin fusion protein-related DNA sequence SeqID1398.

albumin fusion protein; albumin activity; human serum albumin; serum osmotic pressure; shelf-life; stability; antidiabetic; gene therapy; diabetes mellitus; human; gene; ds.

Ношо

WO2003060071-A2.

24-JUL-2003

, 2001US-0341811P. ; 2002US-0350388P. ; 2002US-035190P. ; 2002US-0359370P. ; 2002US-0360000P. 23-DEC-2002; 2002WO-US040891 28-JAN-2002; 26-FEB-2002; 28-FEB-2002; 21-DEC-2001; 24-JAN-2002;

2002US-0378950P 27-MAR-2002; 08-APR-2002; 10-MAY-2002;

2002US-0382617P. 2002US-0383123P. 2002US-0385708P. 2002US-0394625P 24-MAY-2002; 28-MAY-2002; 05-JUN-2002; 10-JUL-2002;

OM protein

Run on:

Sequence:

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M12913 Synthetic h 103833 Sequence 35 A07328 Synthetic D A07329 Synthetic D A11939 Nucleotide A11940 Nucleotide A119515 Sequence 41 I12515 Sequence 28 AR275652 Sequence BD224077 Method fo BT006808 Home sapil
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10234 Sequence 4
103602 Sequence 4
107905 Sequence 15
20054 DNA encodin
200191 DNA coding
200575 Synthetic D
83919 DNA encodin
AR274665 Sequence
J02547 Human (synt
AR102882 Sequence
AR1088061 Sequence
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      102917 Sequence 6

500074 DNA sequence

100910 Sequence 2

114159 Sequence 12

114160 Sequence 14

114161 Sequence 14

114161 Sequence 16

V00082 Arrificial

E43908 Novel vecto
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Shin,H.-C., Chang,S.-G., Kim,D.-Y. and Kim,C.-S.
Proinsulin derivative and process for producing human insulin
Patent: US 5562267-A 17 05-0CT-1999;
Location/Qualifiers
1. 258
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Matches:
Conservative:
Mismatches:
Gaps:
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Sequence 17 from patent US 5962267.
AR077833.1 GI:10004579
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/wol_type="unassigned DNA"
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E43909
100217
200074
100910
114159
114161
ARHSINS
E43908
SYNINSGSA
                                                                                                                                                                   AR275652
BD224077
BT006808
BT007778
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AR102882
AR108061
AR134709
E39197
AR274664
ARC710S
AS7719
AR175913
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103602
107905
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Query Match:
DB:
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AR077833
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  Command line parameters:
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-LODEXT=0 -UNITS=bits -STRAT=1 -END=-1 -MATRIX=01go -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=quality -TRR MIN=1 -ALIGN=15 -MODE=LOCAL
-USFR=-DCO-LIGN=200 -THR.PSIZE=500 -MINIEN=0 -MAXLEN=2000000000
-USFR=US10783095 @CGN 1 1 3731 @runat 22112004 143630 25630 -NCPU=6 -ICPU=3
-NO MAAP -LARGEQUERS -NEG SCORES=0 -MAIT -DSPBLOCK=100 -LONGLOG
-DSV TIMBOUT=120 -WARN TIMBOUT=30 -THRRADS=1 -XGAPOP=60 -XGAPEXT=60 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR077833 Sequence
A48809 Sequence 1
A48810 Sequence 2
AR069914 Sequence
                                                               November 22, 2004, 20:49:53; Search time 2542 Seconds (without alignments) 483.687 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
         GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                              frame_plus_p2n model
                                                                                                                                                                                                 4526729 seqs, 23644849745 residues
                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                    US-10-783-095-10
26
1 GGGPGAGSLQPLALEGSLQKRGIVEQ 26
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                                                                                                                                                  Xgapop 60.0 , Xgapext 60.0 Ygapop 60.0 , Ygapext 60.0 Fgapop 6.0 , Fgapext 7.0 Delop 6.0 , Delext 7.0
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A48809
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seq length: 200000000
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Minimum DB Maximum DB

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Unclassified.
1 (bases 1 to 269)
8 Doulain, J.-C., Cattolico, L., Ducancel, F. and Menez, A. Modified bacterial alkaline phosphatases and their applications Patent: US 5891699-A 10 06-APR-1999;
Location/Qualifiers
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conflict with the conceptual translation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GlyGlyGlyProGlyAlaGlySerLeuGlnProLeuAlaLeuGluGlySerLeuGlnLyS
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Other publication CN 2155451 960206
Other publication SK 97195 960207
Other publication SI 9500250 960229
Other publication RG 99844 960229
Other publication RG 99842 960219
Other publication PL 309882 960214
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Sequence 10 from patent US 5891699.
AR069914.1 GI:7220802

    269
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DNA sequences encoding biosynthetic insulin precursors and process for prepation of insulin

Tor prepation of insulin

Patent: EP 0704527-A 103-APR-1996;

PLIVA PHARM & CHEM WORKS (VU)

Other publication CN 1126/61 960216

Other publication SK 97195-960206

Other publication SK 97195-960209

Other publication SC 9500250 960229

Other publication SC 9500299 960214

Other publication PL 309882 960214

Other publication PL 309882 960214
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MNS sequences encoding blosynthetic insulin precursors and process for preparion of insulin 203-APR-1996;
Patent: EP 0704527-A 203-APR-1996;
                                                      133 GECGGGGGCCCTGGTGCAGCCAGCCTGCAGCCCTTGGAGGGGTCCCTGCAAG 192
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Sequence 2 from Patent BP0704527.
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